PTO/SB/05 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

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UTILITY PATENT APPLICATION **TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

| Attorney Docket No. | | 8733.1048.00-US | | | |
|------------------------|--|-----------------|---|--|--|
| First Inventor | | Byung-Chul Ahn | þ | | |
| Title | Title LIQUID CRYSTAL DISPLAY HAVING A HORIZONTAL ELECTRIC FIELD AND METHOD OF FABRICATING THE SAME | | | | |
| Express Mail Label No. | | | i | | |

| APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents. | MS Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 | | | | | | |
|--|--|--|--|--|--|--|--|
| X Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original, and a duplicate for fee processing) Applicant claims small entity status. See 37 CFR 1.27. X Specification [Total Pages 49] | 7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) | | | | | | |
| (preferred arrangement set forth below) - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure | b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies); or ii. Paper c. Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS 9. X Assignment Papers (cover sheet & document(s)) 10. 37 CFR 3.73(b) Statement (when there is an assignee) Attorney | | | | | | |
| 4. X Drawing(s) (35 U.S.C. 113) [Total Sheets 36] 5. Oath or Declaration [Total Sheets 2] | 11. English Translation Document (if applicable) 12. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 Citations | | | | | | |
| a. X Newly executed (original or copy) | 13. Preliminary Amendment | | | | | | |
| b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) 14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized) | | | | | | | |
| i. DELETION OF INVENTOR(S) | 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) | | | | | | |
| Signed statement attached deleting inventor(s) named in the prior application, | 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. | | | | | | |
| see 37 CFR 1.63(d)(2) and 1.33(b). | 17. X Other: Claim for Priority | | | | | | |
| 6. Application Data Sheet. See 37 CFR 1.76 | | | | | | | |
| 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the | | | | | | | |
| specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.: | | | | | | | |
| Prior application information: Examiner Art Unit: | | | | | | | |
| For CONTINUATION OR DIVISIONAL APPS only: The entire disclosured Box 5b, is considered a part of the disclosure of the accompany reference. The incorporation can only be relied upon when a portion h | sure of the prior application, from which an oath or declaration is supplied ing continuation or divisional application and is hereby incorporated by as been inadvertently omitted from the submitted application parts. | | | | | | |
| | ONDENCE ADDRESS | | | | | | |
| Customer Number: | OR X Correspondence address below | | | | | | |
| Name MCKENNA LONG & ALDRIDGE LLP Song K. Jung | | | | | | | |
| Address 1900 K Street, N.W. | | | | | | | |
| City Washington State | DC Zip Code 20006 | | | | | | |
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| Name (Print/Type) Rebecca Goldman Rudich | Registration No. (Attorney/Agent) 41,786 | | | | | | |
| Signature horye Lobales | 5257 for Date April 2, 2004 | | | | | | |
| Rebesco Goldman | | | | | | | |



PTO/SB/17 (10-03)
Approved for use through 7/31/2006. OMB 0651-0032
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Effective 10/01/2003, Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

| Complete if Known | | | | | | | |
|----------------------|-----------------------|--|--|--|--|--|--|
| Application Number | Not Yet Assigned | | | | | | |
| Filing Date | Concurrently Herewith | | | | | | |
| First Named Inventor | Byung-Chul Ahn | | | | | | |
| Examiner Name | Not Yet Assigned | | | | | | |
| Art Unit | N/A | | | | | | |
| Attomey Docket No. | 8733.1048.00-US | | | | | | |

| | | ζ | ii t | | | | | |
|--|-----------------------------|-------------|-------------|-------------|---------------------|--|----------|--|
| TOTAL AMOUNT OF PAYMENT (\$) 918.00 | Attomey Docket No. | | | ket No | э. | 8733.1048.00-US | | |
| METHOD OF PAYMENT (check all that apply) | FEE CALCULATION (continued) | | | | | | | |
| X Check Credit Money Order Other None Deposit Account: | 3. A | ADDITIO | ONAL | FEES | | | | |
| Deposit | Larg | e Entity | Small | Entity | _ | | | |
| Account 50-0911 | Fee Code | Fee (\$) | Fee Code | Fee (\$) | | Fee Description | Fee Paid | |
| Deposit Account McKenna Long & Aldridge LLP | 1051 | 130 | 2051 | 65 | Surcharge | e – late filing fee or oath | | |
| Name The Director is authorized to: (check all that apply) | 1052 | 50 | 2052 | 25 | Surcharge sheet. | e – late provisional filing fee or cover | | |
| Charge fee(s) indicated below X Credit any overpayments | 1053 | 130 | 1053 | 130 | Non-Engli | ish specification | | |
| X Charge any additional fee(s) or any underpayment of fee(s) | 1812 | 2,520 | 1812 | 2,520 | For filing a | request for ex parte reexamination | | |
| Charge fee(s) indicated below, except for the filling fee | 1804 | 920* | 1804 | 920* | - | ng publication of SIR prior to | | |
| to the above-identified deposit account. | 1805 | 1,840* | 1805 | 1,840* | D | ng publication of SIR after | | |
| FEE CALCULATION | 1251 | 110 | 2251 | 55 | | for reply within first month | | |
| 1. BASIC FILING FEE | 1252 | 420 | 2252 | 210 | Extension | for reply within second month | | |
| Large Entity Small Entity | 1253 | 950 | 2253 | 475 | Extension | for reply within third month | | |
| Fee Fee Fee Fee Fee Description Fee Paid Code (\$) Code (\$) | 1254 | 1,480 | 2254 | 740 | Extension | for reply within fourth month | | |
| 1001 770 2001 385 Utility filing fee 770.00 | 1255 | 2,010 | 2255 | 1,005 | Extension | for reply within fifth month | | |
| 1002 340 2002 170 Design filing fee | 1401 | 330 | 2401 | 165 | Notice of | Appeal | | |
| 1003 530 2003 265 Plant filing fee | 1402 | 330 | 2402 | 165 | Filing a br | rief in support of an appeal | | |
| 1004 770 2004 385 Reissue filing fee | 1403 | 290 | 2403 | 145 | Request f | or oral hearing | | |
| 1005 160 2005 80 Provisional filing fee | 1451 | 1,510 | 1451 | 1,510 | Petition to | institute a public use proceeding | | |
| SUBTOTAL (1) (\$) 770.00 | 1452 | 110 | 2452 | 55 | Petition to | revive – unavoidable | | |
| . 30B101AC (1) (3) 770.00 | 1453 | 1,330 | 2453 | 665 | Petition to | revive - unintentional | | |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE | 1501 | 1,330 | 2501 | 665 | Utility issu | ue fee (or reissue) | | |
| Extra Fee from Claims below Fee Paid | 1502 | 480 | 2502 | 240 | Design is | sue fee | | |
| Total Claims 26 -20** = 6 x 18.00 = 108.00 | 1503 | 640 | 2503 | 320 | Plant issu | ie fee | | |
| Independent 2 -3** = x = 0.00 | 1460 | 130 | 1460 | 130 | Petitions | to the Commissioner | | |
| Claims 2.33 | 1807 | 50 | 1807 | 50 | Processir | ng fee under 37 CFR 1.17(q) | | |
| Large Entity Small Entity | 1806 | 180 | 1806 | 180 | Submissi | on of Information Disclosure Stmt | | |
| Fee Fee Fee Fee Fee Code (\$) Code (\$) | 8021 | 40 | 8021 | 40 | | g each patent assignment per (times number of properties) | 40.00 | |
| 1202 18 2202 9 Claims in excess of 20 | 1809 | 770 | 2809 | 385 | | ubmission after final rejection 1.129(a)) | | |
| 1201 86 2201 43 Independent claims in excess of 3 | 1810 | 770 | 2810 | 385 | For each | additional invention to be | | |
| 1203 290 2203 145 Multiple dependent claim, if not paid | 1 | | 1 | | | i (37CFR 1.129(b)) | - | |
| 1204 86 2204 43 ** Reissue independent claims over original patent | 1801 | | 2801 | 385 | - | for Continued Examination (RCE) for expedited examination | | |
| 1205 18 2205 9 ** Reissue claims in excess of 20 | 1802 | 2 900 | 1802 | 900 | | gn application | | |
| and over original patent | Other fee (specify) | | | | | | | |
| SUBTOTAL (2) (\$) 108.00 | •Red | duced by | Basic F | iling Fee | e Paid | SUBTOTAL (3) (\$) | 40.00 | |
| **or number previously paid, if greater; For Reissues, see above | 1 | | | | | | | |

| SUBMITTED BY | | | (Complete | (if applicable)) |
|-------------------|-----------------------|--|-----------|------------------|
| Name (Print/Type) | ebecca Goldman Rudich | Registration No. (Attorney/Agent) 41,786 | Telephone | (202) 496-7463 |
| Signature | Gener P. Balla | Reft 52587 | Date | April 2, 2004 |